

Field assessment of *Trypanosoma cruzi* infection and host survival in the native rodent *Octodon degus*

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Chagas disease is a zoonosis caused by the flagellated parasite *Trypanosoma cruzi* and transmitted by triatomine insects to several mammalian species acting as reservoir hosts. In the present study, we assess *T. cruzi*-prevalence, survivorship and *T. cruzi*-infection rate of the endemic rodent *Octodon degus* from a hyper-endemic area of Chagas disease in Chile. Parasite detection is performed by PCR assays on blood samples of individuals captured in austral summer of 2010, and on non-infected individuals recaptured in 2011 as well as on new captures. Results show a high infection level in this species (up to 70%). Infected *O. degus* have the same chance of surviving to the next reproductive season as uninfected individuals, irrespective of sex. We suggest that *O. degus*, an abundant long-lived rodent with high dispersal capability, could be considered an important native reservoir of *T. cruzi* in the wild transmission cycle of Chagas disease in Chile. © 2011 Elsevier B.V.